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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/584,626

Applicant(s)

NIWANO, KAZUHIITO

Examiner

KHALID ABDALLA

Art Unit

4173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 06/26/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This application has been examined. Claims 1-17 are pending in this application.

Information Disclosure Statement

2. The Examiner has considered the references listed on the Information Disclosure statement submitted on 06/26/2006 (see attached PTO-1449).

Drawings

3. The examiner contends that the drawings submitted on 06/26/2006 are acceptable for examination proceedings.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15,16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Pankaj (US 20020183066 A1).

Regarding claim 15, Pankaj discloses ACDMA (Code Division Multiple Access) communications system (a wireless communication system employing a Code Division-Multiple

Access, CDMA scheme see [0007]) in which a mobile station sends a transmission request for permission to transmit packet data to a base station and transmits said packet data to said base station (for data transmission the data request specifies the data rate at which the data is to be sent, the length of the data packet transmitted see [0036] and also In a CDMA system, communications between users are conducted through one or more base stations see [0030]) according to transmission schedule information about a transmission schedule which said base station determines in response to said transmission request (a method and apparatus for scheduling transmissions in a communication system with application to multiple classes of users see [0009] and also in a wireless communication system employing a Code Division-Multiple Access, CDMA, scheme, one scheduling method assigns each of the subscriber units all code channels see [0007]) . , characterized in that said mobile station comprises: a transmitting unit for transmitting said transmission request for permission to transmit packet data to said base station, and for transmitting said packet data to said base station (a method for transmitting data between one remote station of a plurality of remote stations and a base station in a wireless communication system includes receiving at the base station information transmitted by the one remote station see [0013]) . a receiving unit for receiving said transmission schedule information (According to one aspect, in a wireless communication system a scheduling method includes receiving channel see [0011]) . from said base station, and for receiving a result of judgment of reception of said packet data which is transmitted to said base station by said transmitting unit; and a control unit for controlling said transmitting unit so that said transmitting unit transmits a transmission request (for data transmission the data request specifies the data rate at which the

data is to be sent, the length of the data packet transmitted see [0036] and also In a CDMA system, communications between users are conducted through one or more base stations see [0030]) for permission to transmit new packet data before said receiving unit completes the reception of said reception judgment result, and said base station comprises: a receiving unit for receiving (According to one aspect, in a wireless communication system a scheduling method includes receiving channel see [0011]) said transmission request from said mobile station, and for receiving packet data which corresponds to said transmission request and which is transmitted by said mobile station; a scheduling unit, responsive to a transmission request for permission to transmit new packet data (The channel scheduler 812 also initializes the weights associated with the new queues therefore it inherent new packets to be transmitted see [00132]) which said receiving unit receives, for, when a result of judgment of reception of the packet data which is transmitted according to said transmission schedule information shows a failure of reception, assigning a transmission schedule (a method and apparatus for scheduling transmissions in a communication system with application to multiple classes of users see [0009] and also in a wireless communication system employing a Code Division-Multiple Access, CDMA, scheme, one scheduling method assigns each of the subscriber units all code channels see [0007]) to retransmission of said packet data which said receiving unit has failed to receive on a priority basis (the null data rate indicates to the AN 122 that the AT 126 is not able to receive data see [0036]), and for creating information about said assigned transmission schedule (a method and apparatus for scheduling transmissions in a communication system with application to multiple classes of users see [0009] and also in a wireless communication system employing a Code Division-

Multiple Access, CDMA_s scheme, one scheduling method assigns each of the subscriber units all code channels see [0007]); and a transmitting unit for transmitting both the transmission schedule information created by said scheduling unit and said result of judgment of reception of the packet data to said mobile station (the data packets received in error can be retransmitted see [0060]).

Regarding claim 16, Pankaj discloses a communications method for use in a CDMA (Code Division Multiple Access) (a wireless communication system employing a Code Division-Multiple Access, CDMA scheme see [0007]) terminal which sends a transmission for permission to transmit packet data to a base station and transmits said packet data to said base station (for data transmission the data request specifies the data rate at which the data is to be sent, the length of the data packet transmitted see [0036] and also In a CDMA system, communications between users are conducted through one or more base stations see [0030]) according to transmission schedule information about a transmission schedule which said base station determines in response to said transmission request, characterized in that said communications method comprises:

a step of transmitting a transmission request for permission to transmit next packet data to said base station before receiving a result of judgment of reception of packet data which is transmitted to said base station last time from said base station (The data request specifies the data rate at which the data is to be sent, the length of the data packet transmitted, and the sector from which the data is to be sent that inherent judgment of transmitting and receiving packets see [0036]).

a step of receiving transmission schedule information which corresponds to said transmission request from said base station ; and

a step of transmitting the next packet data to said base station according to said transmission schedule information (for data transmission the data request specifies the data rate at which the data is to be sent, the length of the data packet transmitted see [0036] and also In a CDMA system, communications between users are conducted through one or more base stations see [0030]).

Regarding claim 17, Pankaj discloses A communications method for use in a CDMA (Code Division Multiple Access) base station (a wireless communication system employing a Code Division-Multiple Access,CDMA scheme see[0007]) which receives a transmission request for permission to transmit packet data from a terminal, notifies transmission schedule information which said base station determines in response to said transmission request to said terminal, and receives said packet data which is transmitted thereto by said terminal according to said transmission schedule information(a method and apparatus for scheduling transmissions in a communication system with application to multiple classes of users see [0009] and also in a wireless communication system employing a Code Division-Multiple Access,CDMA scheme, one scheduling method assigns each of the subscriber units all code channels see [0007]), characterized in that said communications method comprises:

a step of receiving said packet data from said terminal; (a wireless communication system includes receiving a value for a delivery priority parameter from each of a plurality of mobile users see [0014]).

a step of receiving said transmission request from said terminal; (for data transmission the data request specifies the data rate at which the data is to be sent, the length of the data packet transmitted see [0036] and also In a CDMA system, communications between users are conducted through one or more base stations see [0030])

a step of, when a result of judgment of reception of said packet data shows a failure of reception(the null data rate indicates to the AN 122 that the AT 126 is not able to receive data see [0036]), assigning a transmission schedule to retransmission (the data packets received in error can be retransmitted see [0060]).

of said packet data which said receiving step has failed (the null data rate indicates to the AN 122 that the AT 126 is not able to receive data see [0036]), to receive by making the retransmission a higher priority than a request for permission to transmit next packet data; and
a step of transmitting the transmission schedule information which corresponds to the retransmission of said packet data to said terminal (transmissions occur with less than a predetermined delay and is therefore a higher priority set than the second set see [0137]also the data packets received in error can be retransmitted see [0060])).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto et al (US 20040022176 A1) in view of Obata et al (US 6912394 B1) hereinafter referred to as Hashimoto and Obata.

Regarding claim 1, Hashimoto discloses a mobile station which sends a transmission request for permission to transmit packet data to a base station (base station apparatus, mobile station apparatus, wireless communication systems, and wireless communication methods SEE [0001]) . and transmits said packet data to said base station according to transmission schedule information about a transmission schedule (Base station apparatus 49 has the function of packet scheduling based on bit error rate see [0124]) which said base station determines in response to said transmission request, characterized in that said mobile station (the baseband signal input, signal detector 5 extracts a signal that request a change of the signal transmission rate (i.e. transmission rate of the downlink signals for when signals are sent from base station 1 to mobile station 10 see [0006] and FIG.1) . comprises: a transmitting unit for transmitting said transmission request for permission to transmit packet data to said base station, and for transmitting said packet data to said base station (the signal transmission rate (i.e. transmission rate of the downlink signals for when signals are sent from base station 1 to mobile station 10), and then inputs this into controller 6. This signal in request of a change of the

signal transmission rate is transmitted from mobile station 10; see [006] and FIG.1).

A receiving unit for receiving said transmission schedule information from said base station (Mobile station 10 receives the signal from base station see [0008] and FIG.1)

Hashimoto does not disclose and a receiving unit for receiving a result of judgment of reception . Of said packet data which is transmitted to said base station by said transmitting unit; and a control unit for controlling said transmitting unit so that said transmitting unit transmits a transmission request for permission to transmit new packet data before said receiving unit completes the reception of said reception judgment result.

However Obata teaches a receiving unit for receiving a result of judgment of reception of said packet data which is transmitted to said base station by said transmitting unit; and a control unit for controlling said transmitting unit (a radio channel control device of a mobile communication system , a reception unit for receiving a communication request and a measurement result of the receiving level of the level measurement channel in a radio zone that is a target of the communication request, that are transmitted from the mobile station at a time of making the communication request see col:3 lines 22-30) so that said transmitting unit transmits a transmission request for permission to transmit new packet data before said receiving unit completes the reception of said reception judgment result (a reception unit for receiving a communication request and a measurement result of the receiving level of the level measurement channel in a radio zone that is a target of the communication request, that are transmitted from the mobile station at a time of making the communication request; and a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR)see col3 lines 22-28) .

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to made use of the disclosure of Hashimoto and combine with teachings of Obata in order to provide judging method in mobile communication systems and radio lines..

Regarding claim 2, note that Obata teaches the mobile station, characterized in that said mobile station includes a transmission data storage unit for temporarily storing packet data which is to be transmitted to the base station(a mobile station, the radio channel control device characterized by having: a table for storing and managing an optimal carrier-to-interference ratio see col:3 lines 15-18), a multiplexing unit for multiplexing the transmission request and the packet data which are to be transmitted to said base station, and for delivering them to the transmitting unit, and a demultiplexing unit for delivering the transmission schedule information and the reception judgment result which are furnished thereto from the receiving unit to the control unit, and characterized in that said control unit controls the transmission of the transmission request (a plurality of radio channels are formed in a radio carrier by time division multiplexing the radio carrier and each one of a plurality of mobile stations uses a respective radio channel, a radio channel control device characterized by having: a reception unit for receiving a communication request and a measurement result of a receiving level of a level measurement channel in a radio zone that is a target of the communication request, that are transmitted from one mobile station at a time of making the communication request see col:3 lines 50-59) and the packet data to said base station based on an amount of packet data stored in said transmission data storage unit, and the transmission schedule information notified from said base station, and instructs said multiplexing unit (a radio channel control device of a mobile

communication system using a TDMA mobile communication scheme in which a plurality of radio channels are formed in a radio carrier by time division multiplexing see col:3 lines 48-52 and abstract) to generate the transmission request for permission to transmit new packet data so as to transmit this transmission request to said base station before said receiving unit completes the reception of the reception judgment result indicating judgment of reception of the transmitted packet data from said base station (a reception unit for receiving a communication request and a measurement result of the receiving level of the level measurement channel in a radio zone that is a target of the communication request, that are transmitted from the mobile station at a time of making the communication request; and a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR)see col3 lines 22-28) .

Regarding claim 3, note that Obata teaches the mobile station, characterized in that when the result of judgment data (a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR) that is corresponding to a received receiving level measurement result from said table see col:3 lines 27-30) of reception of the transmitted packet data from said base station indicates that the reception has failed, the control unit controls the transmitting unit so as to cause it to transmit said packet data to said base station again, and to transmit the transmission request for permission to transmit new packet data to said base station again. (When the communication request from the mobile station 1 is received along with the measurement result of the receiving level of the level measurement channel, the base station 2 transmits these communication request and receiving level measurement result to the radio channel control device 30 through the transmission and reception unit 22, and if there is an unused frequency, an

assignment candidate frequency for DCA is selected (step S8) and the operation returns to the step S4 to carry out the same processing see col:6 lines 56-62 and col:7 lines 26-29) .

Regarding claim 4, note that Obata teaches the mobile station characterized in that transmission and reception of data between the mobile station and the base station are carried out in units of each of N sub frames into which each frame is time-divided (plurality of radio channels are formed in a radio carrier by time division multiplexing the radio carrier and the radio channels are assigned respectively to a plurality of mobile stations see col:1 lines 17-20) and the time division number N is set so that the transmitting unit transmits the transmission request for permission to transmit new packet data to be transmitted for the next time to said base station before the receiving unit completes the reception of the reception judgment result indicating judgment of reception of the transmitted packet data from said base station (a reception unit for receiving a communication request and a measurement result of the receiving level of the level measurement channel in a radio zone that is a target of the communication request, that are transmitted from the mobile station at a time of making the communication request; and a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR) see col3 lines 22-28) .

Regarding claim 5, note that Hashimoto discloses the mobile station, characterized in that the multiplexing unit multiplexes the transmission request information which is to be transmitted to the base station using code multiplexing (Multiplexer 110 multiplexes the transmission data

that is to be sent to base station apparatus 49 with the comparison results (i.e. mobile station reception results) see [0069] and FIG.6).

The generated transmission request has a length longer than frame lengths of other transmission data and received data (the mobile station is assigned its priority in packet transmission based on the scale of the CIR or SIR level see [0003]) .

Regarding claim 6, note that Hashimoto discloses The mobile station, characterized in that the multiplexing unit multiplexes the packet data to be transmitted to the base station using code multiplexing (Multiplexer 110 multiplexes the transmission data that is to be sent to base station apparatus 49 with the comparison results (i.e. mobile station reception results)see[0069] and FIG.6), and the generated packet data has a length longer than frame lengths of other transmission data and received data (the mobile station is assigned its priority in packet transmission based on the scale of the CIR or SIR level see [0003]).

Regarding claim 7, note that Hashimoto discloses the mobile station according to Claim 4, characterized in that the multiplexing unit generates a complex number signal by I/Q multiplexing (the demodulation scheme is selected based on the result of acknowledgement from base station apparatus 49 (acknowledgement of the above-described mobile station reception result), it is still possible to perform IQ multiplexing with communication data and ACK (Acknowledgment)data see [0069]) the transmission request and the packet data which are to be transmitted to the base station, so as to time-multiplex them simultaneously (multiplexing in the time-axis direction see FIG.9 and [0069])

Regarding claim 8, note that Hashimoto discloses the mobile station according to Claim 7, characterized in that the time division number N is an even number, and the multiplexing (Multiplexer 110 multiplexes the transmission data that is to be sent to base station apparatus 49 with the comparison results (i.e. mobile station reception results) see [0069] and FIG.6), unit divides a channel via which either the transmission request or the packet data is to be transmitted (a change request signal is generated and input into modulator 16. Modulator 16 modulates the input, change request signal and generates the modulation signal see [0008]) to the base station into two parts and assigns them to an I-axis and a Q-axis of a complex number signal, respectively (Based on the received information input from despreader 104, channel estimator 105 estimates the shift (distortion) in IQ component, and inputs the result into each of distortion corrector 106 see [0068]).

Regarding claim 9, Hashimoto discloses a base station which receives a transmission request for permission to transmit packet data from a mobile station (base station apparatus, mobile station apparatus, wireless communication systems, and wireless communication methods SEE [0001]), notifies transmission schedule information which said base station determines in response to said transmission request to said mobile station, and receives said packet data which is transmitted thereto by said mobile station according to said transmission schedule information (Base station apparatus 49 has the function of packet scheduling based on bit error rate see [0124] and the baseband signal input, signal detector 5 extracts a signal that request a change of the signal transmission rate (i.e. transmission rate of the downlink signals for when signals are

sent from base station 1 to mobile station 10 see [0006] and FIG.1) .

characterized in that said base station comprises:

a receiving unit for receiving said transmission request from said mobile station (base station 1, receiver 3 receives a radio signal transmitted from mobile station 10 and inputs the received signal into demodulator 4. Demodulator 4 demodulates the input signal to the original base band signal see [0006] and FIG.1), and for receiving packet data which corresponds to said transmission request and which is transmitted by said mobile station;

Hashimoto does not disclose a scheduling unit, responsive to a transmission request for permission to transmit new packet data which said receiving unit receives, for, when a result of judgment of reception of the packet data which is transmitted according to said transmission schedule information shows a failure of reception, assigning a transmission schedule to retransmission of said packet data which said receiving unit has failed to receive on a priority basis, and for creating information about said assigned transmission schedule; and a transmitting unit for transmitting both the transmission schedule information created by said scheduling unit and said result of judgment of reception of the packet data to said mobile station.

However Obata teaches a scheduling unit, responsive to a transmission request for permission (a radio channel control device of a mobile communication system , a reception unit for receiving a communication request and a measurement result of the receiving level of the level measurement channel in a radio zone that is a target of the communication request, that are transmitted from the mobile station at a time of making the communication request see col:3 lines 22-30) to transmit new packet data which said receiving unit receives, for, when a result of judgment of reception of the packet data which is transmitted according to said transmission schedule

information shows a failure of reception(a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR) that is corresponding to a received receiving level measurement result from said table see col:3 lines 27-30), assigning a transmission schedule to retransmission of said packet data which said receiving unit has failed to receive on a priority basis, and for creating information about said assigned transmission schedule; and a transmitting unit for transmitting both the transmission schedule information created by said scheduling unit and said result of judgment of reception of the packet data to said mobile station (When the communication request from the mobile station 1 is received along with the measurement result of the receiving level of the level measurement channel, the base station 2 transmits these communication request and receiving level measurement result to the radio channel control device 30 through the transmission and reception unit 22, and if there is an unused frequency, an assignment candidate frequency for DCA is selected (step S8) and the operation returns to the step S4 to carry out the same processing see col:6 lines 56-62 and clon:7 lines 26-29) .

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to made use of the disclosure of Hashimoto and combine with teachings of Obata in order to provide judging method in mobile communication systems and radio lines.

Regarding claim 10,note that Hashimoto discloses modified by Obata teaches the base station according to Claim 9, characterized in that said base station includes a multiplexing unit for multiplexing(Hashimoto : Multiplexer 110 multiplexes the transmission data that is to be sent to base station apparatus 49 with the comparison results (i.e. mobile station reception results)see[0069] and FIG.6), the transmission schedule information and the result of judgment (Obata: a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR)

that is corresponding to a received receiving level measurement result from said table see col:3 lines 27-30) of reception of the packet data which are to be transmitted to said mobile station into a signal based on information furnished from the scheduling unit, and for furnishing the signal to the transmitting unit, and a demultiplexing unit for furnishing the transmission request (Obata: a plurality of radio channels are formed in a radio carrier by time division multiplexing the radio carrier and each one of a plurality of mobile stations uses a respective radio channel, a radio channel control device characterized by having: a reception unit for receiving a communication request and a measurement result of a receiving level of a level measurement channel in a radio zone that is a target of the communication request, that are transmitted from one mobile station at a time of making the communication request see col:3 lines 50-59) furnished from the receiving unit to said scheduling unit, for determining whether the packet data furnished from said receiving unit has been received correctly, and for furnishing the result of judgment (Obata: a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR) that is corresponding to a received receiving level measurement result from said table see col:3 lines 27-30), of reception of the packet data to said scheduling unit, and characterized in that said scheduling unit instructs said multiplexing unit to create the transmission schedule(Hashimoto : Base station apparatus 49 has the function of packet scheduling based on bit error rate see [0124]) . information again for the packet data which said receiving unit has failed to receive when the result of judgment of reception of the packet data furnished from the said demultiplexing (Hashimoto : Multiplexer 110 multiplexes the transmission data that is to be sent to base station apparatus 49 with the comparison results (i.e. mobile station reception results)see[0069] and FIG.6) unit shows that the reception of the packet data has failed.

Regarding claim 11, Hashimoto discloses a communication system in which a mobile station sends a transmission request for permission to transmit packet data to a base station(base station apparatus, mobile station apparatus, wireless communication systems, and wireless communication methods SEE [0001]) and transmits said packet data to said base station according to transmission schedule (Base station apparatus 49 has the function of packet scheduling based on bit error rate see [0124]) information about a transmission schedule which said base station determines in response to said transmission request(the baseband signal input, signal detector 5 extracts a signal that request a change of the signal transmission rate (i.e. transmission rate of the downlink signals for when signals are sent from base station 1 to mobile station 10 see [0006] and FIG.1) ,

Hashimoto does not discloses base station transmits a result of judgment of reception of packet data which it has received to said mobile station, characterized in that said mobile station transmits transmission request information about new packet data which it will transmit to said base station next before completing reception of a result of judgment of reception of packet data which said mobile station has transmitted to said base station from said base station.

However Obata teaches base station transmits a result of judgment of reception of packet data (a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR) that is corresponding to a received receiving level measurement result from said table see col:3 lines 27-30)which it has received to said mobile station, characterized in that said mobile station transmits transmission request information about new packet data which it will transmit to said base station next before completing reception of a result of judgment (a judgment unit for

adaptively selecting the optimal carrier-to-interference ratio (CIR) that is corresponding to a received receiving level measurement result from said table see col:3 lines 27-30) of reception of packet data which said mobile station has transmitted to said base station from said base station. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to made use of the disclosure of Hashimoto and combine with teachings of Obata in order to provide judging method in mobile communication systems and radio lines..

Regarding claim 12, Obata teaches the communications system, characterized in that when the result of judgment(a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR) that is corresponding to a received receiving level measurement result from said table see col:3 lines 27-30) of reception of the packet data which said mobile station has transmitted to said base station shows that the reception of the packet data has failed, (When the communication request from the mobile station 1 is received along with the measurement result of the receiving level of the level measurement channel, the base station 2 transmits these communication request and receiving level measurement result to the radio channel control device 30 through the transmission and reception unit 22, and if there is an unused frequency, an assignment candidate frequency for DCA is selected (step S8) and the operation returns to the step S4 to carry out the same processing see col:6 lines 56-62 and clon:7 lines 26-29) .

the mobile station transmits said packet data to said base station again, and transmits the transmission request

information about new packet data which it will transmit to said base station next to said base

station again (a reception unit for receiving a communication request and a measurement result of the receiving level of the level measurement channel in a radio zone that is a target of the communication request, that are transmitted from the mobile station at a time of making the communication request; and a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR)see col3 lines 22-28).

Regarding claim 13, note that Obata teaches the communications system according to Claim11, characterized in that transmission and reception of data between the mobile station and the base station are carried out in units of each of N sub frames into which each frame is time-divided(plurality of radio channels are formed in a radio carrier by time division multiplexing the radio carrier and the radio channels are assigned respectively to a plurality of mobile stations see col:1 lines 17-20), and in said mobile station the time division number N is set so that the transmitting unit transmits the transmission request for permission to transmit new packet data to be transmitted for the next time to said base station before the receiving unit completes the reception of the reception judgment result (a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR) that is corresponding to a received receiving level measurement result from said table see col:3 lines 27-30) indicating judgment of reception of the transmitted packet data from said base station (a reception unit for receiving a communication request and a measurement result of the receiving level of the level measurement channel in a radio zone that is a target of the communication request, that are transmitted from the mobile station at a time of making the communication request; and a judgment unit for adaptively selecting the optimal carrier-to-interference ratio (CIR)see col3 lines 22-28) . .

Regarding claim 14, Hashimoto discloses the communications system according to Claim 13, characterized in that the transmission request information or the packet data transmitted from the mobile station to the base station is multiplexed using code multiplexing (Multiplexer 110 multiplexes the transmission data that is to be sent to base station apparatus 49 with the comparison results (i.e. mobile data reception results)see[0069] and FIG.6), and said base station identifies time-divided sub frames with a spread code of either said transmission request information or said packet data (the mobile station is assigned its priority in packet transmission based on the scale of the CIR or SIR level see [0003]) .

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Razoumov et al et al (US 20020093976 A1) Method and apparatus for scheduling packet data transmissions in a wireless communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHALID ABDALLA whose telephone number is (571)270-7526. The examiner can normally be reached on MONDAY THROUGH FRIDAY 7 AM TO 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JINHEE LEE can be reached on 571-272-1977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/K. A./

Examiner, Art Unit 4173

/Jinhee J Lee/

Supervisory Patent Examiner, Art Unit 4173